

MEMORANDUM FOR Biologist, Operations Division (CENWP-OD)

SUBJECT: Bonneville Project, Fishway and Fish Activities for Week 47 of 2020, which covers the period from 15 – 21 November.

1. OPERATION SUMMARY:

a. Daily average river flows ranged from 136.0 to 161.4 kcfs. Daily average powerhouse forebay elevation ranged from 73.8' to 75.4' msl. Daily average project tailwater ranged from 13.2' to 14.3' msl. Secchi disk measurements remained at 7'. Daily average water temperature remained at 50°F.

b. Daily average spill remained at 1.0 kcfs.

c. Unit Operation. PH2 remains the priority powerhouse. Main unit drawdowns are measured every Monday and more frequently as needed.

- Table 1. Main Unit Outages.

Unit	OOS	RTS	Reason
3	0003 on 09 Nov	---	
4	0003 on 09 Nov	---	
5	0003 on 09 Nov	---	
6	0003 on 09 Nov	---	
7	0149 on 10 Nov	1710 on 17 Nov	Forced outage, exiter failed
13	0005 on 16 Nov	1239 on 19 Nov	P.O. Annual QTCI
14	0749 on 20 Nov	---	Forced outage, ground in STS motor

d. Fish Units. Second Powerhouse fish units provide attraction flow for the Washington Shore (WS) fish ladder.

Fish Unit Outages. Fish Units are periodically placed into reserve service (RS) to float trash when debris differentials become excessive and trash raking is not possible.

- Table 2. Fish Unit Outages.

Unit	OOS	RTS	Reason	Duration
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- Table 3. Fish Unit Drawdowns, in Feet.

Date	F1	F2
11/15	0.1'	0.2'
11/16	0.4'	0.6'
11/17	1.1'	1.5'
11/18	0.1'	0.2'
11/19	0.1'	0.2'
11/20	0.2'	0.5'
11/21	0.3'	0.8'

2. MAINTENANCE ACTIVITIES:

a. Auxiliary Water System Closures.

- FV 3-9 was closed for cleaning from 0843 to 0852 on 18 Nov.
- FV 3-7 was closed for cleaning from 1330 to 1425 on 19 Nov.

- FV 3-9 was closed for cleaning from 1330 to 1425 on 19 Nov.
- FV 1-1 was closed for cleaning from 1500 to 1540 on 19 Nov.

- b. STS/VBS Inspections. Nothing to report.
- c. Dewatering and Fish Salvages. Nothing to report.

3. RESEARCH:

- a. Four Peaks Environmental - Fish counting contract: Daytime visual counting (0500 to 2100) began on 01 April. Fish counts can be viewed [here](#).
- b. USFWS – Lamprey Metamorphosis Study: Researchers are preparing equipment in the SMF.
- c. State Agency Pinniped Trapping- sea lion trapping has concluded for the year.

4. FISHWAYS:

- a. Project biologists inspected 15 – 21 November.
- b. Fish passage plan observations.

- Table 5. FPP Items Out of Criteria.

Date	Location	FPP Violation	Cause	Response
Bradford Island				
11/15-21	B-Branch	Ent. Diff. < 1.0'	Unknown	NA
11/15-21	PH1CC	S. Ent. Diff. < 1.0'	Possible Equipment Calibration issues	NA
11/17	A-Branch	Weir Diff > 1.1'	Unknown	NA
Cascades Island – Nothing to report.				
11/15	Entrance	Ent. Diff. < 1.0'	Unknown	NA
11/21	Entrance	Ent. Diff. < 1.0'	Unknown	NA
Washington Shore – Nothing to report.				
11/19	Washington Shore	Weir 37 >1.1'	Unknown	NA

- FG6-11 (Cascades Island) is broken in the partially open position. The diffuser shaft broke away from the motor. Due to the subsidence issues at Cascades Island, repairs cannot occur until crane support is allowed in the vicinity. FG6-11 should be open at tailwaters $\geq 14.0'$.
- FG6-12 (Cascades Island) is mechanically bound in the open position. The diffuser should only be open with tailwaters ranging from 11.0'-33.0'. Due to the subsidence issues at Cascades Island, repairs cannot occur until crane support is allowed in the vicinity.

c. Adult Fishways.

- (1) The AFF remains in service.
- (2) Sensor calibration occurred on 18 Nov.
- (3) SLEDs are installed at all locations.

d. Juvenile Fishways.

- (1) The ITS remains in service (auto-chain gates 3B, 6C, & 10B only).
- (2) The hydro-cannon remains in service.
- (3) The B2CC remains out of service.
- (4) The DSM remains in service.
- (5) STSs are installed.

e. Lamprey Fishways.

- (1) LPSs were taken out of service on 02 November.
- (2) The Bradford Island Wetted Wall (BIWW) remains out of service.
- (3) The PH2 Lamprey Flume Structure (LFS) remains out of service.
- (4) The AFF lamprey trap remains out of service.
- (5) The CI Lamprey trap remains out of service.

f. Avian Monitoring. Avian counts are recorded 01 April – 31 October.

5. WATER QUALITY MONITORING:

- a. Fishway Temperatures. Temperature logs are no longer being taken this year and monitoring will begin again 01 March, 2021.
- b. Zebra Mussel Monitoring. No signs of colonization were observed this reporting week.

6. CONSTRUCTION: Nothing to report.

7. HAZMAT, SPILLS AND CLEANUP: Nothing to report.

8. TELETYPE CURRENTLY IN EFFECT:

- A teletype sent on 18 Nov at 1533 stated a cancelation of the Spillway Outage for Dive Operations in reference to CBT BON R 110520 0811 CO. The spillway outage described in this teletype was cancelled and no longer needed.

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